FECN11 CWIS 031800

THIRTY DAY FORECAST FOR THE GREAT LAKES FOR MARCH ISSUED JOINTLY BY THE CANADIAN ICE SERVICE OF ENVIRONMENT CANADA AND THE U.S. NATIONAL ICE CENTER OF THE UNITED STATES ON 03 MARCH 2004.

Lake Superior

Above to much above normal temperatures prevailed over the entire area during the last half of February. Ice extent and concentrations were less than normal over the entire lake.

Forecast ice conditions from March 3rd to March 15th.

Temperatures will be slightly above to above normal during the first half of March. Little ice growth is expected during the period except for some new lake ice forming overnight. Ice concentrations will continue to decrease along the northwestern section of the lake especially from Isle Royale northeastward towards Nipigon Bay. By mid-month only a few patches of medium and thin lake ice will be present mostly along the northern shore of Isle Royale. The consolidated ice in Thunder Bay will continue to fracture however by the middle of the month the consolidated ice in the northeastern and eastern section of the bay will remain intact. No significant change in Black and Nipigon Bay during the period. Ice along the southern shore of the lake west of the Keweenaw Peninsula will continue loosen and melt. By mid-month, a few patches of medium and thin lake ice with some thick lake ice will prevail mostly near and west of the Keweenaw Peninsula. Further east of the Keweenaw Peninsula to the Whitefish Bay will be mostly open water except for some local patches of consolidated ice. In Whitefish Bay some of the consolidated ice will begin to break up during the period in the northwestern entrance. Ice along the eastern shore north of Whitefish Bay into Michipicoten Bay will decrease in extent and concentration during the first two weeks of March. Mostly open water will prevail elsewhere in the lake

Forecast ice conditions from March 16th to March 31st.

Temperatures will be generally above normal for the period. Patches of ice along the northwestern shore will give way to mostly open water during the third week of March. The consolidated ice in Thunder Bay will continue to fracture in the northeastern section of the bay while the western section of the bay will continue to clear. Little change is forecast for the consolidated ice in Black and Nipigon Bays during the period. Most of the ice along the southern shore near and west of the Keweenaw Peninsula will be melted. The exception will be the consolidated ice around the Apostle Island which will begin to fracture during the third week of March. From the Keweenaw Peninsula eastward, mostly open water conditions will prevail. The fast ice in Whitefish Bay will continue to fracture but some consolidated ice will prevail in the eastern section of the bay. North of Whitefish Bay into Michipicoten Bay, ice conditions will loosen so that by the end of the month only very open drift to open water conditions will prevail.

Lake Huron and Georgian Bay

Temperatures were above normal over the northern regions while the southern section was near normal during the last half of February. The ice extent was generally near

normal in southern Lake Huron while the rest of the lake had less than normal ice extent for the end of February.

Forecast ice conditions from March 3rd to March 15th.

Temperatures will be above normal during the first week of March with near to slightly above normal for the second week. No significant change is forecast for the consolidated ice in the North Channel during the first two weeks of March. Medium lake ice in the northwestern portion of the lake near the Straits of Mackinac will continue to decrease in concentration and give way to mostly open water by mid month. During the period some of the consolidated ice around the Straits of Mackinac will fracture and drift eastward Ice along the western shore of Lake Huron. The remaining consolidated ice in Thunder Bay will fracture during the first week of March. By mid-March, most of the ice in the area will have melted. During the first half of March most of the consolidated ice in Saginaw Bay will fracture. The exception will be the southeastern section where some consolidated ice will remain. The ice in the southern portion of Lake Huron will begin to clear from west to east. An open water zone will develop along the western shore and spread eastward. The concentration will decrease within the ice pack except for along the eastern shore where concentrations will remain high during the period. Along the eastern shore north of Point Clark, the band of ice will decrease in extent however some patches of very close pack medium and thick lake ice will persist until the middle of the month. Georgian Bay ice concentration will decrease especially along the southwestern shore where open water will prevail. By the middle of March, ice concentration will be mostly open drift to close pack medium and thick lake ice in the bay. The rest of Lake Huron will be mostly open water.

Forecast ice conditions from March 16th to March 31st.

Above normal temperatures are forecast for the last half of March. Little change forecast for the consolidated ice in the North Channel during the last two weeks of March. The exception will be sections of the St Mary's River where break-up will occur during the last week of March. No significant ice will be present along the north shore of Lake Huron except for the extreme northwestern section. Break-up of the consolidated ice during the last week of March in the Straits of Mackinac will provide some drifting ice into extreme northwestern Lake Huron. The western shore of Lake Huron will be mostly open water. The remaining consolidated ice in Saginaw Bay will finally fracture during the third week of the month. By the end of the month most of the ice will have melted away except for a patch along the southeastern shore. The few patches of lake ice along the eastern shore will also melt away during the third week of March. The area of open water in the southwestern portion of Georgian Bay will continue to expand northeastward while some open water area will develop east of the entrance to Georgian Bay. By the end of the month only the extreme southeastern portion of the bay will have any ice left. The exception will be the northern shore of the bay where the consolidated ice will prevail.

Lake Erie and Lake St. Clair

Near to slightly above normal temperatures were observed over the western region with near to below normal in eastern sections during the last two weeks of February.

Forecast ice conditions from March 3rd to March 15th.

Temperatures will be above normal during the first week of March and near to slightly above normal for the second week. Most of the ice in Lake St Clair will fracture during the first week of March. By mid-month some open water will develop in the northern section of the lake while the southern portion will still have some patches of medium and thick lake ice. The Western Basin will continue to clear during the first two weeks of March. By the middle of March most of the Western Basin will have open water except in the southeastern where some medium and thin lake ice will persist. The rest of Lake Erie will continue to clear from west to east. By mid-month, only the eastern third of the lake will have close to very close pack medium and thick lake ice. Some consolidated ice will remain in the eastern reaches of the lake as well as some patches along the southeastern shore. The rest of the lake will be mostly open water.

Forecast ice conditions from March 16th to March 31st.

Temperatures will be above normal for the last two weeks of March. Most of the ice in Lake St Clair will have melted away by the end of the third week of March. The rest of the ice in the southeastern section of the Western Basin will also be gone during the third week. The eastward progression of the ice edge in Lake Erie will continue during the last half of March. The consolidated ice in the eastern portion of the lake will fracture and become mobile. By the end of the month, only a few patches of thick and medium lake ice will remain in the extreme eastern portion of the lake. The rest of the lake will have open water.

## Lake Ontario

Temperatures were above normal over the western portion of the lake with near normal over the east during the past two weeks. The ice extent was near normal for this time of year.

Forecast ice conditions from March 3rd to March 15th.

Temperatures will be above normal during the first week of March with near to slightly above normal during the second week. Ice along the southern coast of Prince Edward County will melt during the first week of March. The ice edge in northwestern Lake Ontario, east of Prince Edward County, will retreat slowly northeastward during the period. Concentrations will remain close to very close pack. The consolidated thick lake ice in the Bay of Quinte and in the St Lawrence River will not change significantly during the first two weeks of March. The rest of the lake will be open water to ice free at midmonth.

Forecast ice conditions from March 16th to March 31st.

Above normal temperatures are forecast for the last half of March. The ice edge in northeastern Lake Ontario will continue to retreat northeastward. By the end of the month only a few strips of medium lake ice will prevail. The consolidated ice in St Lawrence River will begin to fracture in the third week of March. The consolidated ice in Bay of Quinte will show signs of break-up during the last week of March. Open water to ice free conditions will prevail elsewhere in Lake Ontario.

## Lake Michigan

Above normal temperatures were observed over the last half of February. Ice extent over the lake was somewhat less than normal.

Forecast ice conditions from March 3rd to March 15th.

Temperatures will be above normal during the first week of March with near to slightly above normal temperatures for the second week of March. The consolidated ice in northern Green Bay will continue to break up during the first half of March. By midmonth, the northern portion of the bay will be fractured except for the Little and Big Bay de Noc. Some of the fractured ice from the bay will drift into the northwestern portion of Lake Michigan but will melt relatively quickly. The ice along the southwestern shore of Lake Michigan will melt during the first week of March. Grand Traverse Bay will be free of ice by the second week of March. Consolidated ice from Beaver Island northward and eastward will begin to fracture along the western and southern edge. By mid-month the area of consolidated ice will be located about 10 miles east of the Straits of Mackinac. The rest of the northeastern portion of the Lake will have some loose medium and thick lake ice by the end of the period. The rest of the lake will have open water to ice free conditions.

Forecast ice conditions from March 16th to March 31st.

The consolidated ice in Green Bay will continue to fracture. By the end of the month, only the southern third of the bay will have some consolidated ice however some coastal fracturing will occur due to run-off. The consolidated medium and thick lake ice in and near the Straits of Mackinac will fracture during the third week of March. By the end of the month, most of the ice in northeastern Lake Michigan will be located northeast of Beaver Island. Concentrations will vary between very close pack near the shore to open drift further offshore

Figure 1: Ice forecast, Western Great Lakes – 15 March, 2004.

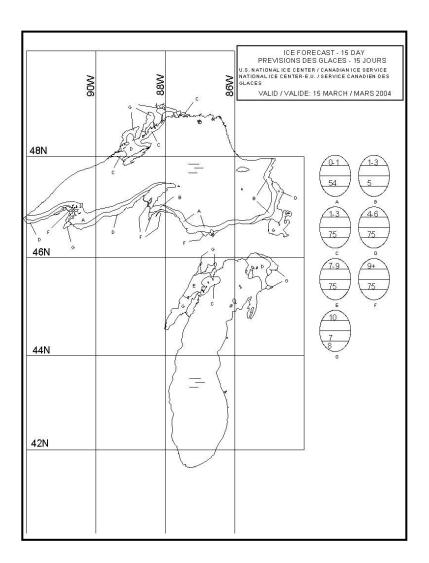


Figure 2: Ice Forecast, Western Great Lakes- 1 April, 2004.

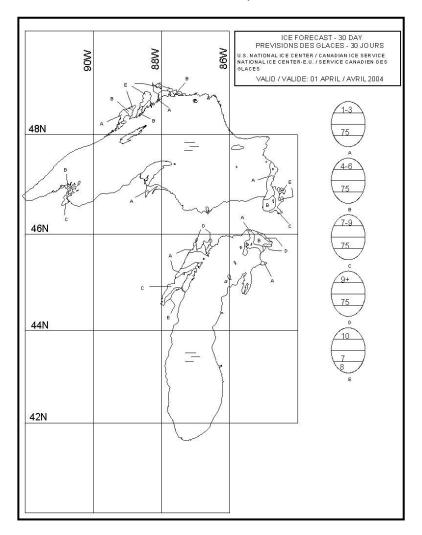


Figure 3: Ice Forecast, Eastern Great Lakes – 15 March, 2004.

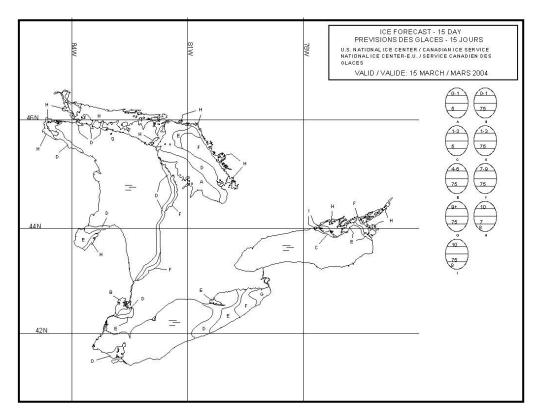


Figure 4: Ice Forecast, Eastern Great Lakes – 1 April, 2004.

THE NEXT 30 DAY FORECAST WILL BE ISSUED ON 17 MARCH 2004. END